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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,280	01/18/2007	Heinz Mueller	C 2861 PCT/US	6680

29737 7590 12/30/2009
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EXAMINER	
FIGUEROA, JOHN J	
ART UNIT	PAPER NUMBER
1796	

NOTIFICATION DATE	DELIVERY MODE
12/30/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/595,280	MUELLER ET AL.	
	Examiner	Art Unit	
	John J. Figueroa	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *13-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *13-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/25/2007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 13-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,165,946 A1 to Mueller et al. (hereinafter 'Mueller'946') in view of USPN 6,881,349 Mueller to Mueller et al. (hereinafter 'Mueller349').

Mueller'946 discloses a pumpable/flowable working fluid used in oil field exploration applications that is based on an emulsifier containing a water-in oil ('w/o') invert emulsion, such as an oil-based water-in-oil invert drilling mud composition, that can easily be removed from a subterranean formation upon completion of the drilling process, wherein due to selecting and adapting the emulsifier system to the oil phase of the invert emulsion, the temperature-controlled phase inversion is achieved at lower temperatures that the in-use temperatures of the w/o invert emulsions (facilitating its cleaning and removal from the formation). (Abstract; col. 8, lines 29-61) The oil phase can contain, *inter alia*, saturated hydrocarbons or olefins; aromatic hydrocarbons; carboxylic acid esters; ethers; fatty alcohols, wherein said carboxylic acid ester can be an ester of a mono-carboxylic alcohol and/or a glycerol ester of natural origin, such as

of unsaturated fatty acids. (Col. 14, line 65 to col. 15, line 37; Examples 5, 8 and 10 disclosing the olefin to have 14 to 16 carbons)

Mueller'946 further discloses that suitable emulsifying compounds for the emulsifier component can comprise fatty acid and/or fatty alcohols esters, particularly partial esters with fatty acids; and alkyl (poly)glycosides ('APG') of long-chain alcohols that have ecological compatibility, wherein the emulsifier component can be present from 5-60% by weight of the composition (Col. 19, lines 41-63; col. 20, lines 1-13) The drilling mud mixtures can additionally contain auxiliaries typically used in drilling applications, such as thickeners, fluid-loss additives, fine-particle weighting materials and salts. (Col. 20, line 57 to col. 21, line 2)

Mueller'946 discloses samples in Examples 3-7 for the drilling fluid composition comprising an invert emulsion having fatty acid compounds with 14-16 carbons; and the use of APG having 12-16 carbons as a co-emulsifier with an invert emulsion in Example 12. The ratio of fatty acid (OMC) to APG that are present in fluid sample 12d is about 5. (See, Table on col. 12-13 for samples of Example 12.)

Although Mueller'946 discloses the invert emulsion fluid containing an alkyl polyglycoside, it does not expressly disclose said alkyl polyglycoside to have the chemical formula recited in the present claims.

However, Mueller '349 teaches alkyl polyglycosides for use in an invert emulsion oil field fluid recycling process, said alkyl polyglycosides (sugar surfactants) having a formula encompassed by that recited in independent claim 13 of the present claims, wherein R is 1 to 22 carbons, the sugar has a glucose unit (5-6 carbons) and n is 1 to

10. (Abstract; col. 1, line 65 to col. 2, line 11; col. 6, lines 37-58) Mueller'349 further teaches that these alkyl polyglycosides are recyclable and environmental friendly. (Col. 5, line 62 to col. 6, line 3)

Therefore, it would have been obvious to a person of ordinary skill in the art at the time that the claimed invention was made to choose an alkyl polyglycoside in accordance with the formula provided in Mueller'349 for the ecological compatible alkyl (poly)glycoside component of the invert emulsion composition in Mueller'946's oil field method. It would have been obvious to one skilled in the art to do so to attain a resultant fluid that is more environmentally friendly when used in the drilling process as taught by Mueller'349.

As to the fluid being pumpable at 5°C to 20°C (claim 23), Mueller'946 discloses that the drilling mud would be pumpable and flowable even at room temperatures. (Col. 20, line 25-56) Moreover, because the APG fluid disclosed in Mueller'946 (and Mueller'349) and the instant claims encompass the same drilling fluid composition, then both sets of fluids must inherently possess the same physical properties, such as thermal stability.

Thus, the instant claims are unpatentable over Mueller'946 and Mueller'349.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references cited are relevant to the instant claims but deemed cumulative.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Figueroa whose telephone number is (571)272-8916. The examiner can normally be reached on Monday-Thursday 8:00-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John J. Figueroa/
Examiner, Art Unit 1796

JJF/JJS